Respiratory system

Supplementary figures
Rhinoscopy
Nerve Supply

Diagram showing the nerve supply to the nasal cavity, including the internal nasal branches of the infra-orbital nerve, nasal branch of the anterior superior alveolar nerve, anterior ethmoid, olfactory bulb, olfactory nerve, sphenopalatine foramen, posterior superior lateral nasal nerves, posterior inferior lateral nasal nerves, and nasopalatine nerve.
Epistaxis

Anterior

Kiesselbach’s plexus

Superior labial artery

Posterior

Sphenopalantine artery

Internal carotid artery

Sphenoid sinus

Anterior & Posterior ethmoidal arteries

Greater palatine artery

- More common
- Occurs in children/young adults
- Usually due to mucosal dryness
- Less severe

- Less common
- Older population
- Hypertension/Atherosclerotic disease
- More severe
CLINICAL CONCERN:
DANGER TRIANGLE of face

Infections can be carried to CNS via valve-less veins of face
Lymph Drainage of the Nasal Cavity

Lymph vessels draining the vestibule, end in submandibular nodes. The rest of nasal cavity is drained to upper deep cervical nodes.
Pharynx
Anatomy of the Larynx

- Epiglottis
- Lesser cornu
- Hyoid bone
- Thyrohyoid ligament (extrinsic)
- Laryngeal prominence
- Thyroid cartilage
- Cricothyroid ligament (intrinsic)
- Cricotracheal ligament (extrinsic)
- Tracheal cartilages
- Cricoid cartilage
- Vestibular ligament
- Vocal ligament
- Cuneiform cartilage
- Comiculate cartilage
- Arytenoid cartilage
- Thyroid cartilage

**a** Anterior view of the intact larynx

**b** Posterior view of the intact larynx

**c** Posterior view showing the relationships among the individual laryngeal cartilages
Muscles of larynx
Superior view

m. vocalis

m. cricothyroideus

m. cricoarytenoideus post.
m. cricoarytenoideus lat.

m. arytenoideus obliquus
m. arytenoideus transversus

m. thyroarytenoideus
First aid: Opening the airways- **Infants** Vs **ADULTS**
Origins:
- Lower 6 costal cartilages
- Xiphoid process
- L1-L5 vertebrae

Diaphragm muscle

Insertion:
- Central tendon of the diaphragm

Medial Arcuate Ligament: arc over psoas major (bilateral); sympathetic chains pass posterior to this ligament

Lateral Arcuate Ligament: arc over quadratus lumborum (bilateral)

Esophageal Hiatus

Median Arcuate Ligament: arc over aorta (unpaired)

R and L Diaphragmatic Crus: both crura form aortic hiatus and median arcuate lig.; right crus forms esophageal hiatus